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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,703	10/02/2003	Tuan Vo-Dinh	6321-241	9197

7590 04/21/2006

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EXAMINER

JUNG, WILLIAM C

ART UNIT	PAPER NUMBER
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3768

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/677,703		VO-DINH, TUAN	
	Examiner		Art Unit	
	William Jung		3737	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed February 3, 2006 have been fully considered but they are not persuasive.

After further consideration of the applicant's remarks, examiner respectfully disagrees. Despite the applicant's attempt to clarify the interpretation of the claimed language by arguing synchronous luminescence in page 8, the claimed limitation in claims 1 and 15 are not the same. Claims 1 and 15 do not include any limitation where the emission of optical wavelength is varying or non-fixed. On the reception of the reflected optical wavelength varies since the reflected optics are scattered as disclosed by Clarke. Therefore, examiner withhold the previous rejection from the previous office action dated October 3, 2005 and restated below.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 11-13, 15, 21, 22, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by *Clarke* (US 6,208,887 B1).

Clarke anticipates all claimed features in claims 1-26.

Claims 1, 15, and 26: Clarke discloses a method and system of diagnosis using excitation radiation through a single optical waveguide or a single optical wavelength bundle where a region of interest or target tissue of the excitation radiation emits emission radiation in

Art Unit: 3737

response, receiving the emission radiation with co-registration of the excitation and emission radiations and synchronously scanning a wavelength of excitation emission radiations to obtain a spectrum (column 2, lines 27-63; column 6, lines 35-55; column 8, lines 10-32).

Claims 2-4: Clarke further discloses that the spectrum or spectroscopical analysis involves distinguishing diseased state from healthy state (e.g. determining arteriosclerotic plaque along a blood vessel by determining calcified, fibrous, or normal) by comparative means (column 7, lines 8-34).

Claims 11-13, 21, and 22: Clarke discloses that the excitation radiation causes scattering in emission radiation therefore, optical filter is essential to rid of unwanted radiation (column 4, lines 61-67).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5-10, 14, 16-20, and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Clarke* as applied to claims 1 and 15 above, and further in view of *Boppart et al* (US 6,485,413 B1).

Clarke substantially discloses all claimed features in claims 5-10, 14, 16-20, and 23-25 as described above.

Claims 5, 23, and 25: However, Clarke is silent as to providing images from the spectroscopical data. This particular method is well known in to art as evident by Boppart et al

Art Unit: 3737

where spectral data is converted to images (column 4, lines 39-64). Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to apply the teachings of Boppart et al's image data conversion from spectral data from Clarke to achieve the claimed invention.

Claims 6-9 and 16-20: In addition, Boppart et al further disclose back end processing where the radiation's intensity is modulates and the time resolved spectroscopy or phase correction is achieved (column 5, lines 3-25; column 7, line 63 - column 8, line 18).

Claims 10 and 14: Furthermore, Boppart et al's invention deals with optical computed tomography (OCT), which inherently includes radiation excitation and receive emission radiation with set time interval.

Claim 24: Both Clarke and Boppart et al uses intensified or amplified CCD as a detector.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 3737

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William Jung, Ph.D. whose telephone number is 571-272-4739.

The examiner can normally be reached on Mon-Fri 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WJC

April 16, 2006


BRIAN L. CASLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700